

LIPE Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP9376b**Specification**

LIPE Antibody (C-term) Blocking Peptide - Product InformationPrimary Accession [Q05469](#)**LIPE Antibody (C-term) Blocking Peptide - Additional Information****Gene ID** 3991**Other Names**

Hormone-sensitive lipase, HSL, LIPE

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

LIPE Antibody (C-term) Blocking Peptide - Protein Information**Name** LIPE**Function**

Lipase with broad substrate specificity, catalyzing the hydrolysis of triacylglycerols (TAGs), diacylglycerols (DAGs), monoacylglycerols (MAGs), cholesteryl esters and retinyl esters (PubMed:15716583, PubMed:15955102, PubMed:19800417, PubMed:8812477). Shows a preferential hydrolysis of DAGs over TAGs and MAGs and preferentially hydrolyzes the fatty acid (FA) esters at the sn-3 position of the glycerol backbone in DAGs (PubMed:19800417). Preferentially hydrolyzes FA esters at the sn-1 and sn-2 positions of the glycerol backbone in TAGs (By similarity). Catalyzes the hydrolysis of 2-arachidonoylglycerol, an endocannabinoid and of 2-acetyl monoalkylglycerol ether, the penultimate precursor of the pathway for de novo synthesis of platelet-activating factor (By similarity). In adipose tissue and heart, it primarily hydrolyzes stored triglycerides to free fatty acids, while in steroidogenic tissues, it principally converts cholesteryl esters to free cholesterol for steroid hormone production (By similarity).

Cellular Location

Cell membrane. Membrane, caveola. Cytoplasm, cytosol. Lipid droplet

{ECO:0000250|UniProtKB:P54310}. Note=Found in the high-density caveolae. Translocates to the cytoplasm from the caveolae upon insulin stimulation (PubMed:17026959). Phosphorylation by AMPK reduces its translocation towards the lipid droplets (By similarity)
{ECO:0000250|UniProtKB:P54310, ECO:0000269|PubMed:17026959}

Tissue Location

Testis..

LIPE Antibody (C-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

LIPE Antibody (C-term) Blocking Peptide - Images**LIPE Antibody (C-term) Blocking Peptide - Background**

LIPE has a long and a short form, generated by use of alternative translational start codons. The long form is expressed in steroidogenic tissues such as testis, where it converts cholesteryl esters to free cholesterol for steroid hormone production. The short form is expressed in adipose tissue, among others, where it hydrolyzes stored triglycerides to free fatty acids.

LIPE Antibody (C-term) Blocking Peptide - References

Bezaire, V., et al. FEBS Lett. 583(18):3045-3049(2009)Chen, H.H., et al. Am. J. Clin. Nutr. 90(2):255-262(2009)Kuzmin, A., et al. Biol. Reprod. 81(2):319-326(2009)Bezaire, V., et al. J. Biol. Chem. 284(27):18282-18291(2009)Drenos, F., et al. Hum. Mol. Genet. 18(12):2305-2316(2009)